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File No. 32.0408

SITTER MOUNTAIN POWER PROJECT A DEVELOPMENT OF STREET WITH AN ENDING MOUNTAIN HOWER AGENCY.

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June 22, 1983

Mr. Brent C. Bradford Executive Secretary Utah Air Conservation Committee 150 West North Temple Salt Lake City, Utah 84110

Dear Mr. Bradford:

Intermountain Power Project (IPP)
Revised Request for Information

This is in response to your letter dated June 8, 1983, requesting additional information pertaining to issuance of a modified air quality approval order for the IPP. The December 3, 1980 approval order is being modified to reflect the downsizing of the Project from four to two generating units and certain design refinements to the air emissions control equipment. These changes will result in substantially lower air emissions and air quality impacts than were contemplated by the original approval order.

The enclosures to this letter provide the requested information. Enclosure 1 is a report by KVB, Inc., Western Engineering Division, titled "Technical Evaluation of Alternative NOx Control Technologies". KVB is an engineering and consulting firm which is one of the most prominent authorities on NOx control technology for combustion sources. KVB's report includes emissions reduction evaluations, side-effect considerations, design details of the existing combustion modification techniques and technical background. Enclosure 2 is a report by Black and Veatch Consulting Engineers, the IPP Architect and Engineer, titled "Cost Analysis of Various NOx and SO2 Control Technologies for the Intermountain Power Project". Black and Veatch is a prominent architectural and engineering firm, having designed more than 38,000 megawatts of new electric generating stations and about 20% of all utility air quality control system capacity contracted for since promulgation of the Clean Air Act. Black and Veatch's report includes the requested cost estimates and economic methodology description. Enclosure 3 is a report by KVB titled "NOx BACT Evaluation for Lynndyl Site Proposed Coal" which was previously submitted to the Environmental Protection Agency in their review concerning boiler slagging.

For SO_2 emissions, Enclosure 2 concludes that it would be extremely difficult, if not impossible, for any scrubbing system to remove 95% of SO_2 emissions on a long-term basis for the IPP. Moreover, to purchase, install and operate such a scrubbing system is estimated to cost \$998 million if installed prior to commercial operation, and \$1.118 billion if installed at a later time.

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Mr. Brent C. Bradford Juna 22, 1983

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Enclosures 1 and 2 conclude that the NOx technologies about which you inquired are either not demonstrated or will not ensure further emission reductions for a plant like the IPP. Therefore, it is unclear whether they would achieve any significant reductions reliably, or any reductions at all, in the already very low NOx emissions for the IPP. Moreover, each of the technologies is shown to be extremely costly. For example, the cost of selective catalytic reduction is estimated to be \$1.694 billion if retrofitted prior to commercial operation and \$1.256 billion if retrofitted at a later time.

We are seriously concerned about the nature of your inquiry for several reasons. First, a new approval order condition requiring the use of any of the control technologies in your inquiry could be prohibitively expensive so as to jeopardize the economic feasibility of the IPP. Also, a new approval order condition of this type could change IPP's bond market rating and thus have a major adverse impact on IPP's ability to obtain financing at a reasonable cost. If either occurred, IPP could easily become too expensive to build and would have to be cancelled. This possibility would be extremely unfortunate since the IPP is planned to generate reliable and vital electrical energy from abundant, low-sulfur Utah coal, to provide economic benefits including the creation of thousands of new jobs within Utah, and to provide the highest degree of air emissions control consistent with reliable and economically feasible operation.

If you or your staff require any additional information, please contact Mr. Roger T. Pelote at (213) 481-3412.

James H. Alle

JAMES H. ANTHONY Project Director

Intermountain Power Project

RTP:glh

Enclosures

cc: Mr. D. Kircher w/Enclosures EPA Region VIII 1860 Lincoln Street Denver, Colorado 30295

Mr. Roger T. Pelote w/Enclosures

Mr. Brent C. Bradford June 22, 1983

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bcc: Mr. Henry V. Nickel w/Enclosures
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1919 Pennsylvania Avenue, N.W.
Washington, D.C. 20036

Mr. James A. Holtkamp w/Enclosures Van Cott, Bagley, Cornwall & McCarthy Suite 1600 50 South Main Street Salt Lake City, Utah 94144

Mr. Lowell L. Smith w/Enclosures Manager, Western Engineering Division KVB P.O. Box 19518 Irvine, California 92714

Mr. Donald O. Swenson w/Enclosures
Project Air Pollution Control Systems Engineer
Black and Veatch Consulting Engineers
P.O. Box 8405
Kansas City, Missouri 64114

Mr. Ronald L. Rencher w/Enclosures Acting General Manager Intermountain Power Agency The Atrium, Suite 101 5250 South 300 West Murray, Utah 84107

Ms. Ann Garnett w/Enclosures Public Affairs Manager Intermountain Power Agency The Atrium, Suite 101 5250 South 300 West Murray, Utah 84107

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bcc: Ralph E. Powell V. J. Foley (2)

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D. W. FOWLER

June 21, 1983

Mr. Dale E. Shore KVB, Inc. Western Engineering Division P.O. Box 19518 Irvine, California 92714

Dear Mr. Shore:

KVB-DWP Agreement No. 10290 Revision Number 1 to Task IPP-NOx Intermountain Power Project (IPP) Best Available Control Technology (BACT) Analysis of NOx Control Technologies for IPP

This is to authorize Revision Number 1 to Task IPP-NOx. Under Agreement No. 10290, you are hereby authorized an additional \$10,000 to complete Task IPP-NOx. Task IPP-NOx is redefined as follows:

VIII. Estimated Expenditures

Not to exceed \$25,000.

The additional costs are required for completion of Task IPP-NOx due to the need for additional information by the Utah Department of Health.

Mr. Roger T. Pelote of our Civil, Structural Engineering and Services Section has been assigned to coordinate this matter.

If you have any questions or if further information is required, please contact me or have your staff contact Mr. Pelote at (213) 481-3412.

Sincerely,

ROBERT C. BURT Engineer of Design and Construction

TLC: gp

cc: Mr. Roger T. Pelote